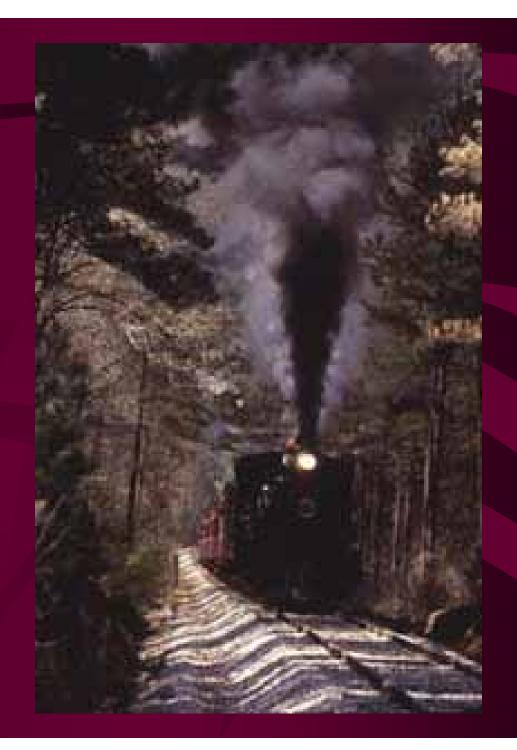
Rails-with-Trails Progress since 1998

California Trails and Greenways Conference
Folsom, California
May 11, 2007



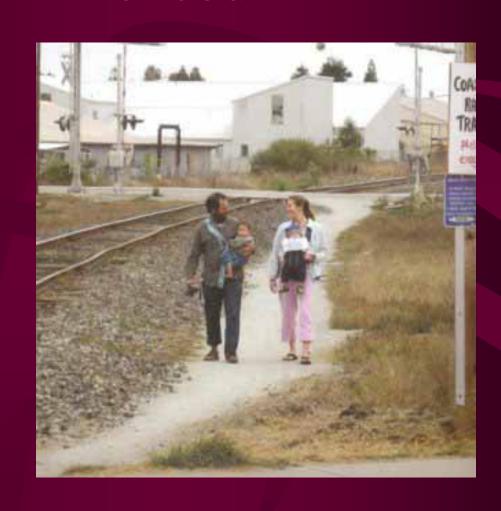
Railroads
Came
First...



..and cities grew around them.



RR Corridors not typically fenced



Often bisect neighborhoods



Why Trails Next to Rails?

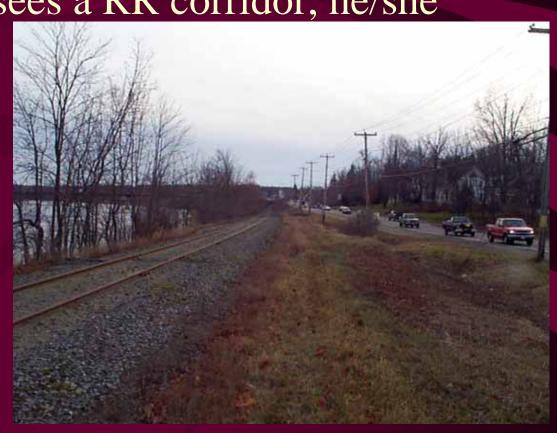
Residents want more places to walk and bike for health, transportation, and the environment

When a trail planner sees a RR corridor, he/she

sees:

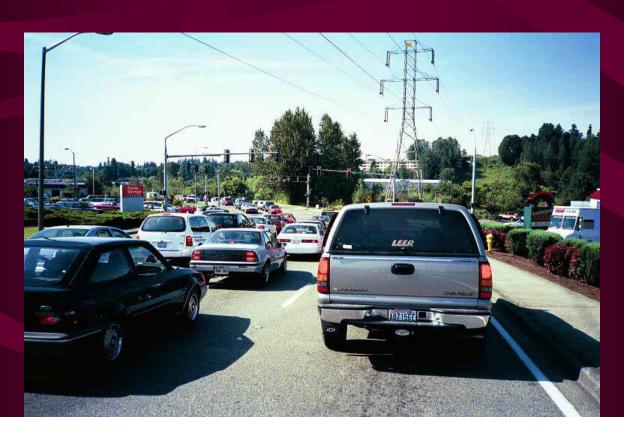
Space,

- few obstructions,
- few crossings,
- pleasing view



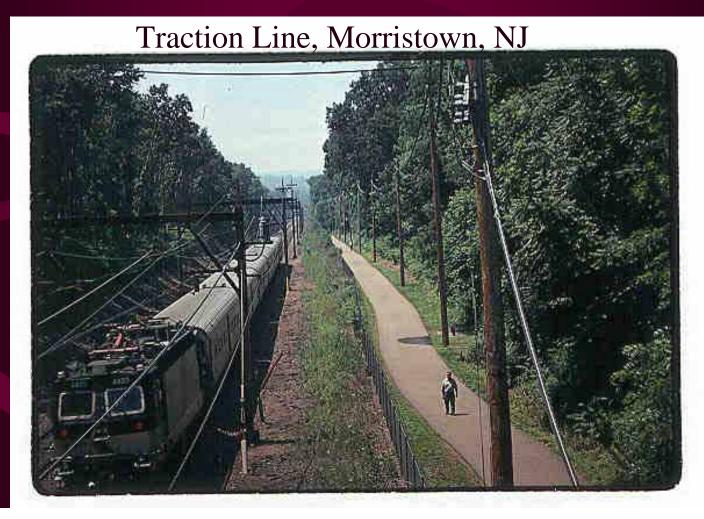
Why RWT?

• The RR corridor is seen as a better alternative than a congested, high speed arterial with 20-40,000 Vehicles per day



Why RWT?

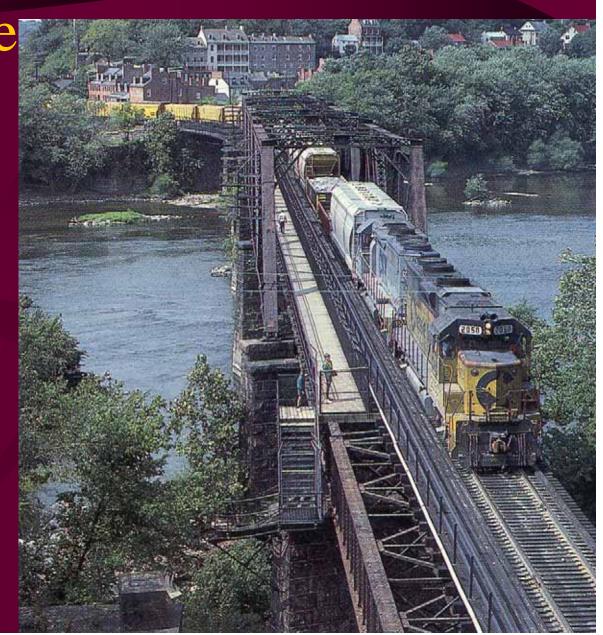
Existing RWTs appear to operate with few problems



RR Perspective

RR Corridors

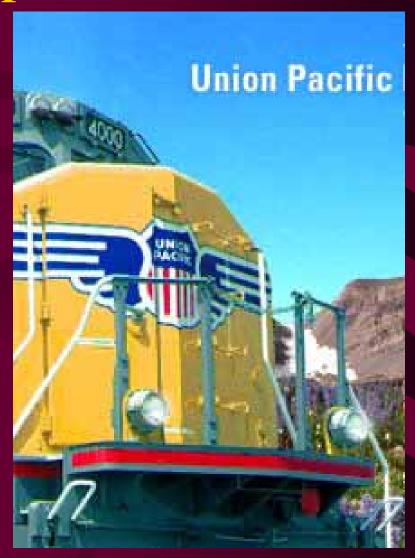
 are private
 property &
 places of



Harper's Ferry

RR Perspective

- Trains kill or injure close to 1000 trespassers per year
- Vandalism and trespassing cost millions per year



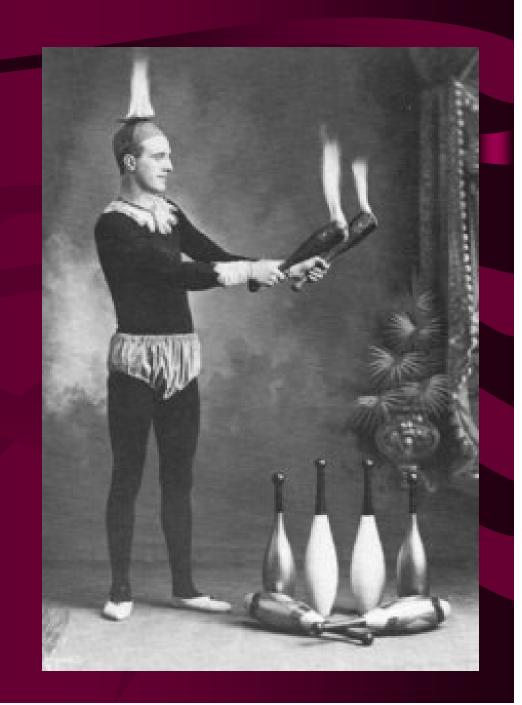
RR Perspective

 "Bike trails should not be located along railroad right-of-way." Deborah Sedares, Providence and Worcester RR

Blackstone River Bikeway Project, RI



How can trail planners better juggle these competing demands?



2001

U.S. Department of Transportation,

- Federal Highway Administration
- Federal Railroad Administration.
- National Highway Traffic Safety Administration
- Federal Transit Administration.

Commissioned Alta Planning + Design to prepare a study of existing Rails with Trails resulted in:

"Rails with Trails: Lessons Learned"

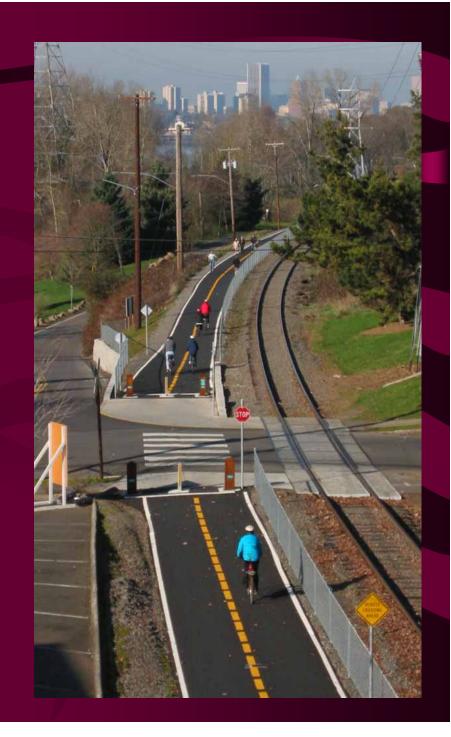
The study, completed in 2002 includes:

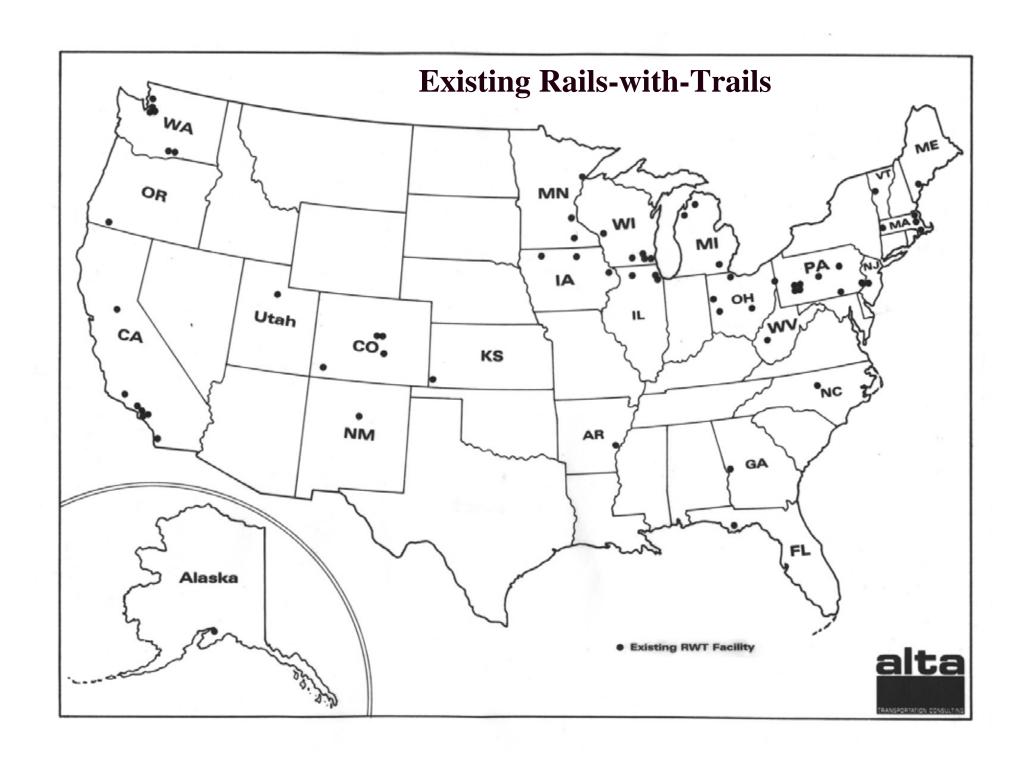
- In-depth study of 18 existing or planned trails.
- Interviews with RR representatives, law enforcement officials, trail managers.
- Field review of location and issues.

- Trespassing,
 vandalism, crash data
 collection
- Review of available data on trespassing, accidents, etc.
- Follow-up field review and interviews once planned trails are built.

The Trend

- More than 65 RWTs in the U.S. today; over 400 miles of trails
- More than 80 additional RWTs in the planning stages, with over 900 additional miles
- Total existing and planned (as of March 1999): 134 trails, over 1200 miles, in over 40 states





Transit RWTs

- Dallas Cottonbelt & DART line (Plano)
- ATSF Santa Anna CA
- Folsom Parkway RWT CA
- Green Bay Trail, IL
- King Promenade Trail, San Diego
- Norwottuck RWT, MA
- Porter Rockwell Trail, Utah
- Southwest Corridor, MA
- Northeast Corridor, PN (Amtrak)
- Traction Line, NJ
- Watts Towers Crescent Greenway, LA
- I-205 Trail, Portland OR



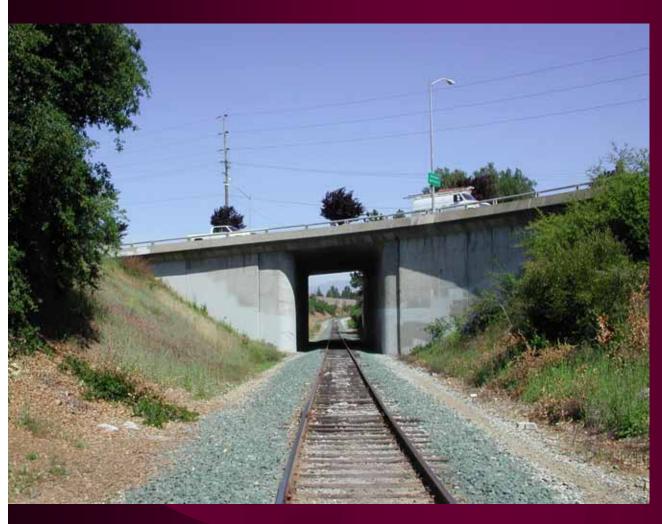
Folsom Parkway, CA. Bike Path

Process: Recommendations

- Trail developers:
 Include
 alternatives to
 RWTs in bike/trail
 master planning
 efforts
- Trail developers:
 Undertake
 comprehensive
 feasibility study of
 all RWT projects



Feasibility Study Examples



Cupertino RWT:

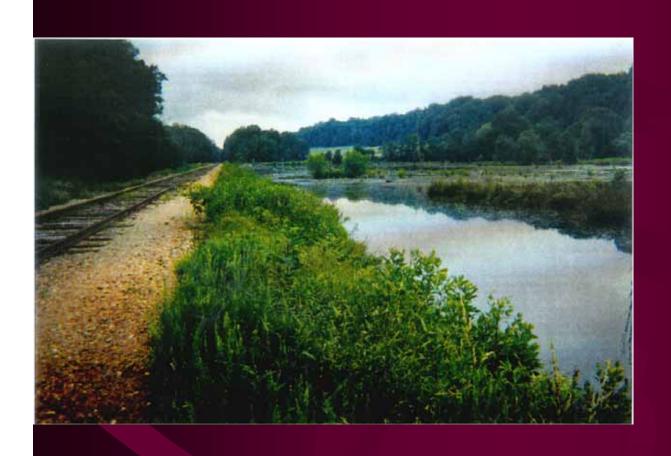
UP tracks/ROW

Partly feasible

Low frequency/speed

Problems: Single track tunnel, grade, narrow setback in some areas

Feasibility Study Examples



Indian Head RWT:

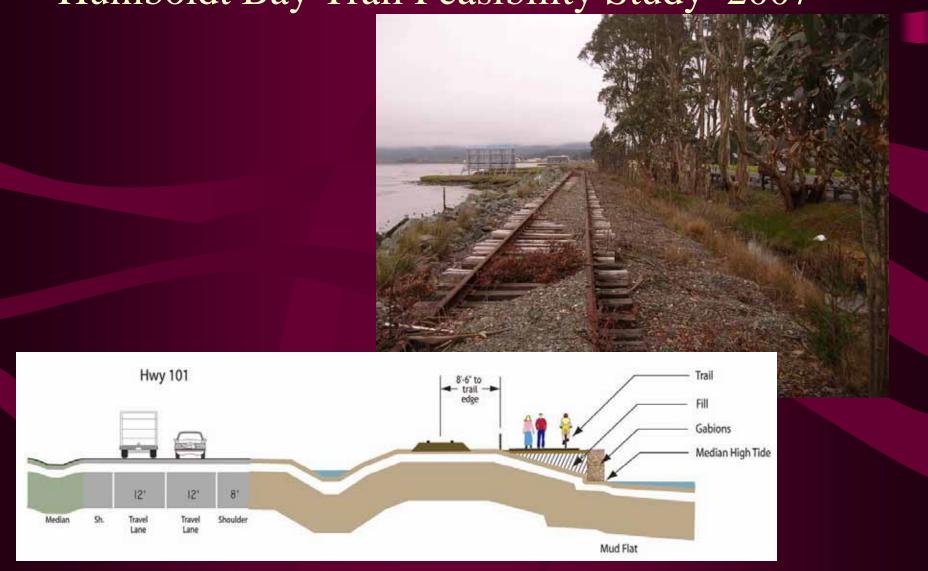
U.S. Navy RR

Feasible

Low frequency/speed Adequate space

Feasibility Study Examples

Humboldt Bay Trail Feasibility Study 2007



Temporary trail use

Railbanking: Allow for the preservation of disused railroad easements for possible future railroad activity. Could be used for interim trail use.



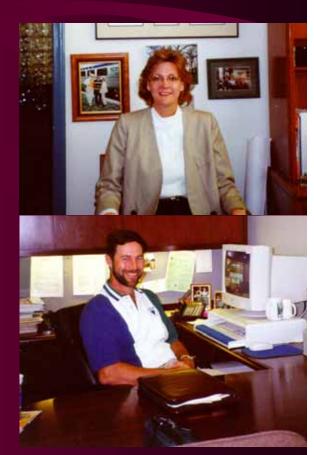


Process: Recommendations

• Trail developers: **Involve railroads** throughout the process

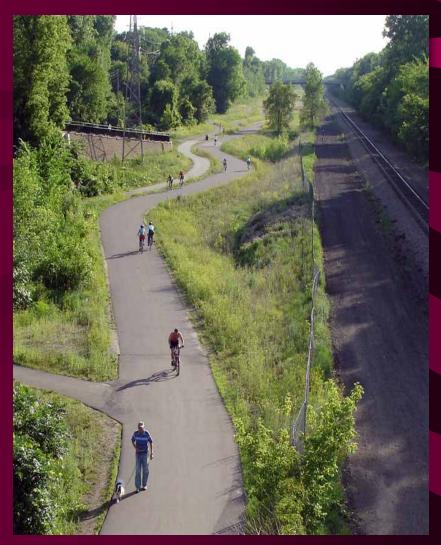
"What a corridor is today does not mean it will be the same tomorrow. "I would have liked to have been involved earlier in the planning process." Jan Schneider, Manager of Railroad Facilities, DART

 "We did not realize how formal the railroad industry is. Make sure in all situations that the railroad company is involved." Joe Moore, Assistant Director of Parks and Rec at Grapevine TX



Findings: Process

- Class I RR Companies less supportive than short-line and transit line operators.
- Both RR companies and trail advocates are often far apart in their mutual understanding. Need to build on common ground.



Findings: Process

- Potential RR benefits include:
 - Financial compensation
 - Reduced trespassing, dumping, vandalism

- Reduced illegal crossings
- Reduced petty crime
- Increased public awareness of RR industry
- Improved aesthetics

Process: Recommendations

- Trail developers: Coordinate with other stakeholders, undertake extensive public review
- Railroad companies: develop internal process, assign technical team
- All parties: maintain a log of conversations
 & decisions

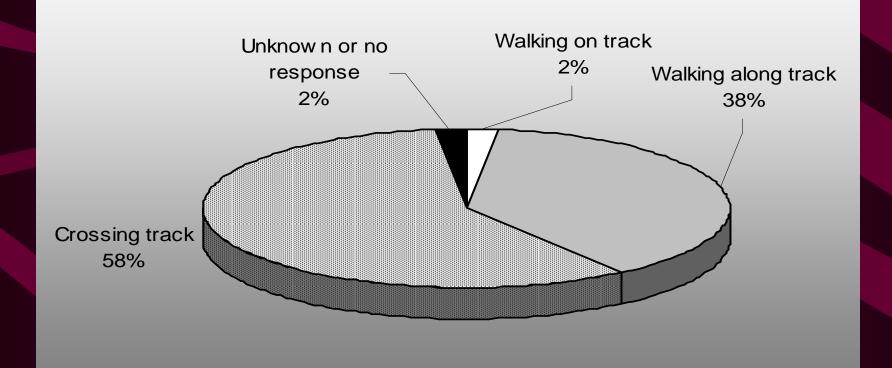
Legal: Findings

Railroad concerns

- Definition of trail users as trespassers
- Increasing trespassing incidents
- Injuries to trail users
- Legal defense costs

Trespassing

Case Studies: Type of Trespassing, by Percentage of Incidents, 2000



Legal: Recommendations

- Trail developers: **initiate legal research** as early as possible
- Trail agency should acquire property whenever possible
- Trail developers: use best design treatments
- All parties: review & strengthen State liability reduction/protection & other statutes
- Trail agencies: shoulder liability responsibility
- Trail agency: purchase/provide insurance to cover legal & other costs

Legal: Findings

Existing protections include

- Recreational Use Statutes (49 states)
- Trespassing statutes (all states)
- Rail-trail/ recreational/trail statutes (20 states)
- Easement/lease agreements
- Insurance
- Transfer of ownership

Liability

Insurance/Indemnification:

- 95% of existing RWTs insured through trail management agency umbrella policies
- About half the trails have specific indemnification agreements

Legal Protections for landowners and adjacent property owners:

 California Recreational Use Statutes, Public Resources Code, Public Utility Code and Civil Code.



Findings: Design

- 3 main issues of focus:
 - Setback distance
 - Separation technique
 - Crossings
- Many other design issues
- "The devil's in the details"



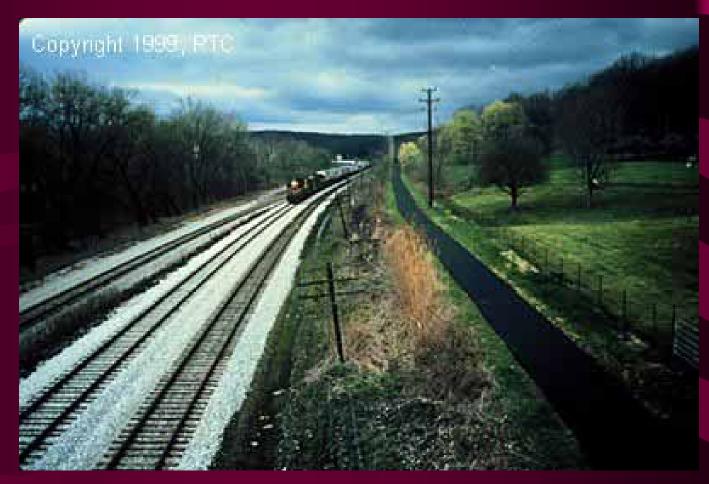
Design: Recommendations

- Maximize setback distance
- Provide fencing/separation when requested
- Minimize (or close) at-grade crossings
- Carefully analyze trestles/bridges
- Divert trails around tunnels
- Assess environmental impacts

Setback

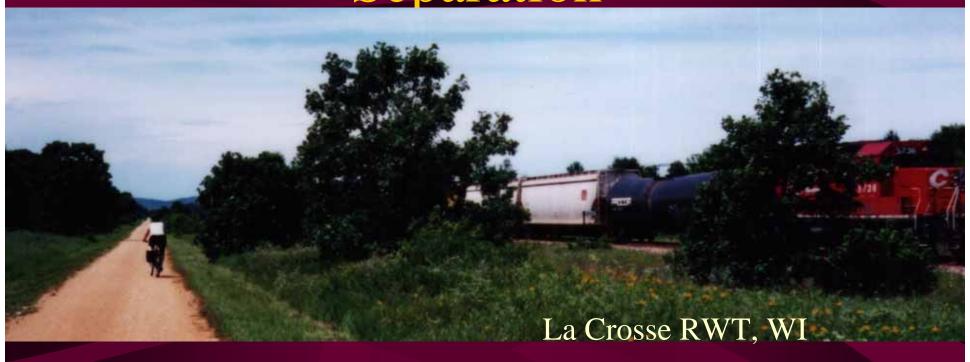
Trail setback distance should correlate to train speed, frequency, type, site conditions, engineering judgement

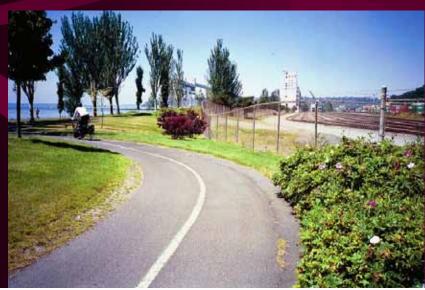
Range of 10 ft to 100 ft

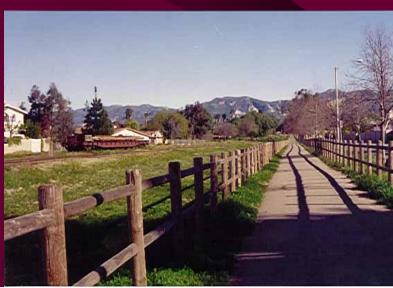


Stavich Trail, OH









Crossings

- Area of greatest concern
- Most existing crossings are at-grade, others under or over RR tracks
- Railroads actively working to remove atgrade crossings; the fewer new ones, the better

Crossing Designs

At-grade crossings

Passive warning devices

Libba Cotton Trail, NC

ATSF Trail, Irvine, CA

Crossing Designs



At-grade crossings
Active warning
devices

Burlington Waterfront Bikeway, VT

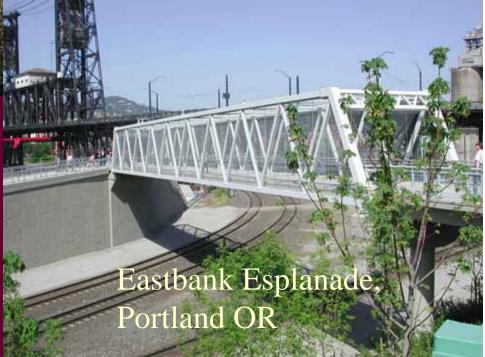
Davis, CA

Crossing Designs

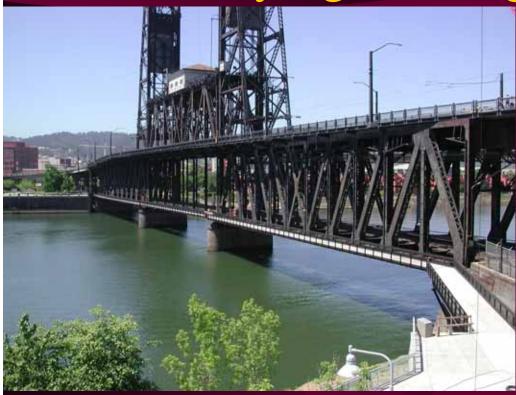
Tony Knowles Coastal
Trail, Anchorage AK

Above grade crossings

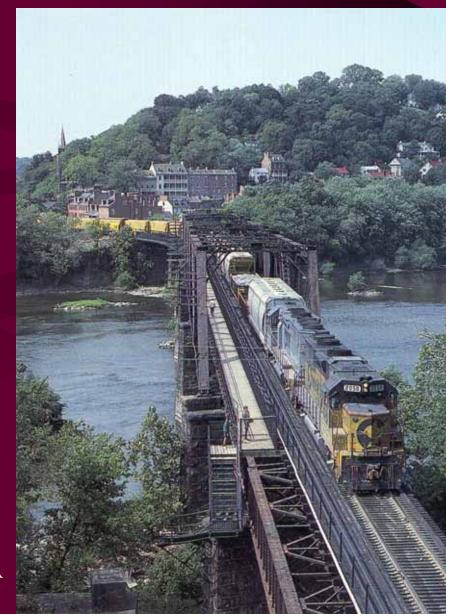
Below grade crossings



Modifying existing RR Structures

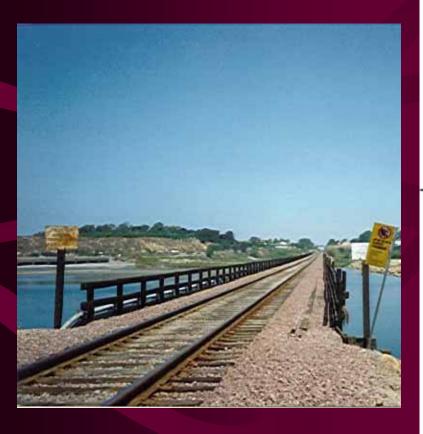


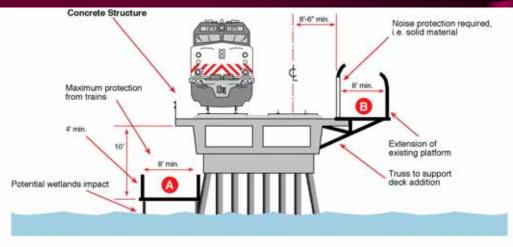
Steel Bridge Riverwalk Portland OR

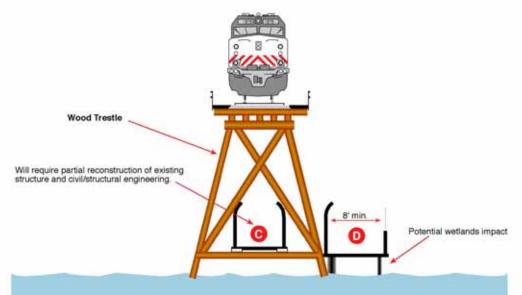


Harper's Ferry, VA

Modifying existing RR Structures

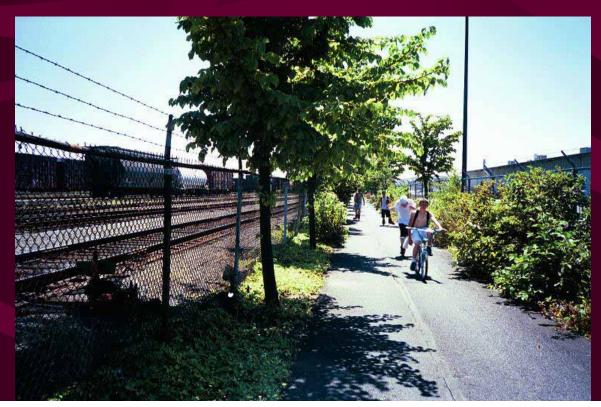






Findings: Design

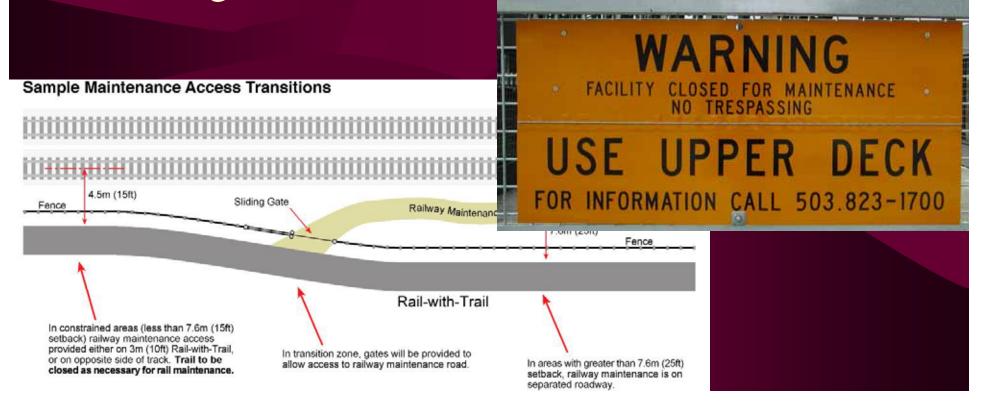
 With proper planning, design, construction, and operation, it appears that RWT may help channelize people and keep them off the track



Recommendations: O&M

• All parties: involve operators, signalmen, maintenance personnel in feasibility and design analysis

Trail design must meet RR maintenance needs

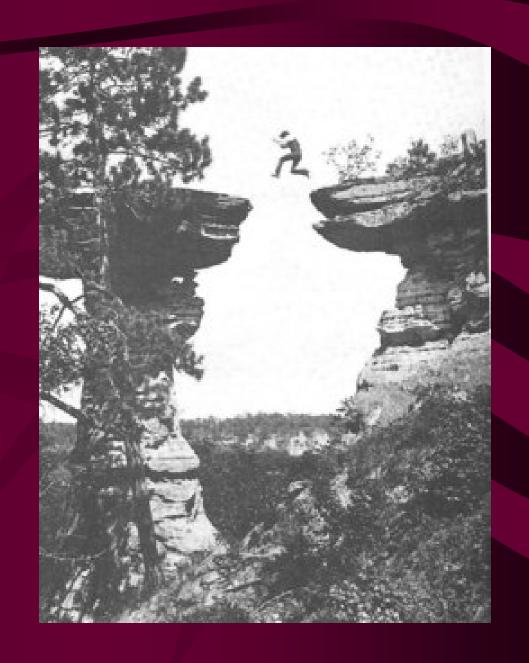


Solutions

Management

- Model RR Corridor Management Strategy
- Indemnification strategies
- Model easement agreements
- Operation & maintenance practices
- Model trespassing ordinances
- Education of local communities

Hopefully this presentation has given you some tools, so you can bridge the chasm....



..and improve communication.



"Rails with Trails: Lessons Learned" is available from: The Federal Transportation

The Federal Transportation Administration: Publications

Thank You

